

**IN THE CLAIMS:**

Please amend the claims as follows:

Claims 1-3 (Cancelled).

4. (Currently Amended) A method for purifying used oil, comprising:  
mixing a raw used oil ~~that contains light hydrocarbons~~ with a ~~phase transfer catalyst in the presence of a~~ base compound to form a mixture comprising used oil and base compound;  
processing the mixture comprising used oil and base compound to provide an at least partially dehydrated used oil mixture comprising used oil and base compound;  
adding a phase transfer catalyst to the at least partially dehydrated used oil mixture comprising used oil and base compound to provide a used oil mixture comprising used oil, phase transfer catalyst, and base compound, wherein the phase transfer catalyst comprises a glycol; and  
removing contaminants from at least a portion of the used oil mixture comprising used oil, phase transfer catalyst, and base compound.
5. (Cancelled).
6. (Previously Presented) The method of claim 4, wherein the phase transfer catalyst comprises ethylene glycol.
7. (Currently Amended) The method of claim 4, wherein removing contaminants from at least a portion of the used oil mixture comprising used oil, phase transfer catalyst, and base compound comprises distilling the used oil mixture at a temperature of about 200°C to about 275°C and a pressure of about 100 torr to about 200 torr.

8. (Currently Amended) The method of claim 4, wherein removing contaminants from at least a portion of the used oil mixture comprising used oil, phase transfer catalyst, and base compound comprises distilling the used oil mixture at a temperature of about 275°C to about 300°C and a pressure of about 0.05 torr to about 0.2 torr.

9. (Currently Amended) The method of claim 4, wherein removing contaminants from at least a portion of the used oil mixture comprising used oil, phase transfer catalyst, and base compound comprises distilling the used oil mixture at a temperature of about 200°C to about 300°C and a pressure of about 0.05 torr to about 200 torr.

10. (Cancelled).

11. (Previously Presented) The method of claim 4, wherein the base compound is an inorganic or organic base compound.

12. (Previously Presented) The method of claim 11, wherein the inorganic base compound is selected from the group consisting of sodium hydroxide, potassium hydroxide, and combinations thereof.

13. (Previously Presented) The method of claim 4, wherein the used oil mixture comprising used oil, phase transfer catalyst and inorganic base compound ~~a mixture of the used motor oil and phase transfer catalyst~~ comprises of from about 1% to about 10% by weight of the phase transfer catalyst.

14. (Cancelled).

15. (Cancelled).

16. (Previously Presented) The method of claim 4, wherein the used oil comprises motor oil.

17. (Currently Amended) A method for removing contaminants from a used petroleum distillate, comprising:

mixing a raw used petroleum distillate ~~that contains light hydrocarbons~~ with ~~ethylene glycol in the presence of~~ a base compound to form a mixture comprising used petroleum distillate and base compound;

processing the mixture comprising used petroleum distillate and base compound to provide an at least partially dehydrated used petroleum distillate mixture comprising used petroleum distillate and base compound;

adding ethylene glycol to the at least partially dehydrated used petroleum distillate mixture comprising used petroleum distillate and base compound to provide a used petroleum distillate mixture comprising used petroleum distillate, ethylene glycol, and base compound; and

removing the contaminants from at least a portion of the used petroleum distillate mixture comprising used petroleum distillate, ethylene glycol, and base compound using means for distillation.

18. (Previously Presented) The method of claim 17, wherein the used petroleum distillate comprises motor oil.

19. (Currently Amended) The method of claim 17, wherein removing contaminants from at least a portion of the used petroleum distillate mixture comprising used petroleum distillate, ethylene glycol, and base compound comprises distilling the used petroleum distillate mixture at a temperature of about 200°C to about 275°C and a pressure of about 100 torr to about 200 torr.

20. (Currently Amended) The method of claim 17, wherein removing contaminants from at least a portion of the used petroleum distillate mixture comprising used petroleum distillate, ethylene glycol, and base compound comprises distilling the

used petroleum distillate mixture at a temperature of about 275°C to about 300°C and a pressure of about 0.05 torr to about 0.2 torr.

21. (Currently Amended) The method of claim 17, wherein removing contaminants from at least a portion of the used petroleum distillate mixture comprising used petroleum distillate, ethylene glycol, and base compound comprises distilling the used petroleum distillate mixture at a temperature of about 200°C to about 300°C and a pressure of about 0.05 torr to about 200 torr.

22. (Currently Amended) The method of claim 17, wherein the used petroleum distillate mixture comprising used petroleum distillate, ethylene glycol, and inorganic base compound ~~a mixture of the used petroleum distillate and ethylene glycol~~ comprises of from about 1% to about 10 % by weight of ethylene glycol.

23. (Cancelled).

24. (Cancelled).

25. (Currently Amended) A method for removing contaminants from used ~~motor~~ oil, comprising:

mixing used ~~motor~~ oil ~~that contains light hydrocarbons~~ with ethylene glycol in the presence of a base compound to provide a used oil mixture comprising used oil, ethylene glycol and base compound; and then

distilling the used ~~motor~~ oil mixture comprising used oil, ethylene glycol and base compound at a temperature of about 200°C to about 300°C and a pressure of about 0.05 torr to about 200 torr.

26. (Previously Presented) The method of claim 25, wherein the base compound comprises an inorganic compound.

27. (Previously Presented) The method of claim 26, wherein the inorganic base compound is selected from the group consisting of sodium hydroxide, potassium hydroxide, and combinations thereof.

28. (Currently Amended) The method of claim 25, wherein the used oil mixture comprising used oil, ethylene glycol and base compound ~~a mixture of the used motor oil and ethylene glycol~~ comprises of from about 1% to about 10% by weight of the ethylene glycol.

29. (Cancelled).

30. (Cancelled).

31. (Currently Amended) A method for removing contaminants from used motor oil, comprising:

mixing used motor oil ~~that contains light hydrocarbons~~ with an inorganic base compound to provide a used oil mixture comprising used oil and inorganic base compound;

mixing the used motor oil mixture comprising used oil and inorganic base compound ~~containing light hydrocarbons~~ with a phase transfer catalyst to provide a used oil mixture comprising used oil, phase transfer catalyst and inorganic base compound, ~~in the presence of the inorganic base compound,~~ wherein the phase transfer catalyst comprises a glycol; and ~~then~~

distilling the used motor oil mixture comprising used oil, phase transfer catalyst and inorganic base compound at a temperature of about 200°C to about 275°C and a pressure of about 100 torr to about 200 torr to remove at least a portion of the phase transfer catalyst, providing a distilled used oil mixture.

32. (Previously Presented) The method of claim 31, wherein the inorganic base compound is selected from the group consisting of sodium hydroxide, potassium hydroxide, and combinations thereof.

33. (Cancelled).

34. (Previously Presented) The method of claim 31, wherein the phase transfer catalyst comprises ethylene glycol.

35. (Currently Amended) The method of claim 31, further comprising distilling the distilled used motor oil mixture at a temperature of about 275°C to about 300°C and a pressure of about 0.05 torr to about 0.2 torr.

36. (Currently Amended) The method of claim 31, wherein the used oil mixture comprising used oil, phase transfer catalyst and inorganic base compound ~~a mixture of the used motor oil and phase transfer catalyst~~ comprises of from about 1% to about 10% by weight of the phase transfer catalyst.

37. (Cancelled).

38. (Cancelled).

39. (Currently Amended) The method of claim ~~[[11]]~~ 4, wherein a concentration of the base compound in the used oil mixture comprising used oil and base compound is between 0.5 weight percent and 5 weight percent on a dry weight basis.

40. (Currently Amended) The method of claim 17, wherein a concentration of the base compound in the used petroleum distillate mixture comprising used petroleum distillate and base compound is between 0.5 weight percent and 5 weight percent on a dry weight basis.

41. (Currently Amended) The method of claim ~~[[26]]~~ 25, wherein a concentration of the base compound in the ~~used motor oil~~ used oil mixture comprising used oil, ethylene

glycol and base compound is between 0.5 weight percent and 5 weight percent on a dry weight basis.

42. (Currently Amended) The method of claim ~~[[32]]~~ 31, wherein a concentration of the inorganic base compound in the ~~used motor oil~~ used oil mixture comprising used oil and inorganic base compound is between 0.5 weight percent and 5 weight percent on a dry weight basis.